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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,488	03/27/2007	Takumi Arie	S1459.70115US00	2387

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EXAMINER	
LEIBY, CHRISTOPHER E	
ART UNIT	PAPER NUMBER
2629	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/580,488	ARIE ET AL.	
	Examiner	Art Unit	
	CHRISTOPHER E. LEIBY	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 October 2011*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *1-15* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-15* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Detailed Action

1. **Claims 1-15** are pending.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/17/2011 has been entered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 5-7, 11, and 15 are rejected under 35 U.S.C. 103(a) as being obvious over **Aoyanagi** (JP Patent 406083296).

Regarding **independent claim 1**, Aoyanagi discloses an information providing apparatus comprising: image display means mounted on a mobile object (*reference [industrial application] wherein a graphical display device is mounted in a vehicle*), presenting an image display of information which assists travel of the

mobile object (*reference paragraph [0002] wherein graphical device projects navigation image to facilitate the drive*);

vibration detecting means for detecting vibration produced on said image display means and sending a detection output signal (*paragraph [0017] wherein the video signal displacement, which the vehicle itself vibrating such as the longitudinal acceleration of the vehicle, is subtracted from the vibration detection means so vibrations not smaller than the video signal displacement is detected*) when said vibration is not smaller than said predetermined level, said predetermined level being greater than an absence of vibration (*again paragraph [0017] the detected vibrations are not smaller than the video signal displacement level/predetermined level which is bigger than an absence of vibration altogether*); and operation control means for:

modifying a display mode of said information presented in the image display by said image display means from a first display mode to a second display mode (*paragraphs [0005] and [0008]*), when receipt of said detection output signal over a predetermined duration of positive length indicates that the vibration of not smaller than said predetermined level produced on said image display means sustains over the predetermined duration (*paragraph [0008] wherein the detection means are over a duration of a first frame not smaller than a first frame and every frame thereafter wherein a second duration would be a second frame and third duration would be a third frame*); and

modifying the display mode of said information presented in the image display by said image display means form the second display mode to the first display mode when an absence of output of said detection output signal is

detected over a predetermined duration of positive length (*as both described by applicant and paragraphs [0006]-[0009] the device detects a vibration via the accelerometer in which x and y counter-displacement values are used in an opposite direction to negate the vibration displacement occurring during normal vehicle operations in which the device is mounted, a vibration is defined as a shaking or oscillation movements meaning that the vibration on the device moves to a peak height of movement and eventually at some point [not necessarily the end point of movement] to the original position, Aoyanagi's discloses a first display mode image display without vibration, without counter-displacement values such as those vibrations detected smaller than the video signal paragraph [0017], and a second display mode image display enabling the counter-displacement of the image when a vibration is detected paragraph [0008], at the end of the oscillation or vibration back to the device's original position this transitions the image display device from the send display mode of vibration correction to the first display mode of normal operation since there are no more vibrations detected at this time*).

Aoyanagi does not disclose wherein the predetermined level is static nor that the predetermined level is defined prior to a vibration being detected.

It would have been obvious to one skilled in the art at the time of the invention to enable Aoyanagi's vibration system with a static predetermined level programmed prior to vibration detection allowing the system to be made cheaper and simpler lowering processing needs without the need of an additional sensor with a varying instantaneous level as disclosed by Aoyanagi (*paragraph [0017]*).

Regarding **claim 5**, Aoyanagi discloses an information providing apparatus, wherein: said mobile object is a vehicle (*paragraph [0001] reference vehicle*), and said image display means is configured so as to present image display of a road map image having a current position of said vehicle and an

image expressing a travel route superposed therein, as said information (*paragraph [0002] reference navigation image*).

Regarding **independent claim 6**, Aoyanagi discloses a method of providing information allowing image display of information which assists travel of a mobile object on an image display section of an information providing apparatus (*reference paragraph [0002] wherein graphical device projects navigation image to facilitate the drive*) mounted on said mobile object (*reference [industrial application] wherein a graphical display device is mounted in a vehicle*), the method comprising:

predetermined vibration level that is greater than an absence of vibration (*paragraph [0017] the detected vibrations are not smaller than the video signal displacement level/predetermined level which is bigger than an absence of vibration altogether*);

subsequent to the defining, detecting vibration produced on said image display section;

determining whether said detected vibration is not smaller than the predetermined vibration is not smaller than the predetermined vibration level;

sending a detection output signal when said vibration is not smaller than said predetermined vibration level *paragraph [0017] wherein the video signal displacement, which the vehicle itself vibrating such as the longitudinal acceleration of the vehicle, is subtracted from the vibration detection means so vibrations not smaller than the video signal displacement is detected*);

modifying a display mode of said information presented in the image display by said image display means from a first display mode to a second display mode (*paragraphs [0005] and [0008]*), when receipt of said detection output

signal over a predetermined duration of positive length indicates that the vibration of not smaller than said predetermined level produced on said image display means sustains over the predetermined duration (*paragraph [0008] wherein the detection means are over a duration of a first frame not smaller than a first frame and every frame thereafter wherein a second duration would be a second frame and third duration would be a third frame*); and

modifying the display mode of said information presented in the image display by said image display means form the second display mode to the first display mode when an absence of output of said detection output signal is detected over a predetermined duration of positive length (*as both described by applicant and paragraphs [0006]-[0009] the device detects a vibration via the accelerometer in which x and y counter-displacement values are used in an opposite direction to negate the vibration displacement occurring during normal vehicle operations in which the device is mounted, a vibration is defined as a shaking or oscillation movements meaning that the vibration on the device moves to a peak height of movement and eventually at some point [not necessarily the end point of movement] to the original position, Aoyanagi's discloses a first display mode image display without vibration, without counter-displacement values such as those vibrations detected smaller than the video signal paragraph [0017], and a second display mode image display enabling the counter-displacement of the image when a vibration is detected paragraph [0008], at the end of the oscillation or vibration back to the device's original position this transitions the image display device from the send display mode of vibration correction to the first display mode of normal operation since there are no more vibrations detected at this time*).

Aoyanagi does not disclose wherein the predetermined level is static nor that the predetermined level is defined prior to a vibration being detected.

It would have been obvious to one skilled in the art at the time of the invention to enable Aoyanagi's vibration system with a static predetermined level programmed prior to vibration detection allowing the system to be made cheaper and simpler lowering processing needs without the need of an additional sensor with a varying instantaneous level as disclosed by Aoyanagi (*paragraph [0017]*).

Regarding **independent claim 7**, Aoyanagi discloses an information providing apparatus comprising:

an image display section mounted on a mobile object, presenting an image display of information which assists travel of the mobile object (*reference [industrial application] wherein a graphical display device is mounted in a vehicle and reference paragraph [0002] wherein graphical device projects navigation image to facilitate the drive*);

a vibration detection section that detects vibration produced on said image display section, and sending a detection output signal (*paragraph [0017] wherein the video signal displacement, which the vehicle itself vibrating such as the longitudinal acceleration of the vehicle, is subtracted from the vibration detection means so vibrations not smaller than the video signal displacement is detected*) when said vibration is not smaller than said predetermined level, said predetermined level being greater than an absence of vibration (*again paragraph [0017] the detected vibrations are not smaller than the video signal displacement level/predetermined level which is bigger than an absence of vibration altogether*);

and operation control section that:

modifies a display mode of said information presented in the image display by said image display section from a first display mode to a second display mode (*paragraphs [0005] and [0008]*), when receipt of said detection output

signal over a predetermined duration of positive length indicates that the vibration of not smaller than said predetermined level produced on said image display means sustains over the predetermined duration (*paragraph [0008] wherein the detection means are over a duration of a first frame not smaller than a first frame and every frame thereafter wherein a second duration would be a second frame and third duration would be a third frame*); and

modifies the display mode of said information presented in the image display by said image display section form the second display mode to the first display mode when an absence of output of said detection output signal is detected over a predetermined duration of positive length (*as both described by applicant and paragraphs [0006]-[0009] the device detects a vibration via the accelerometer in which x and y counter-displacement values are used in an opposite direction to negate the vibration displacement occurring during normal vehicle operations in which the device is mounted, a vibration is defined as a shaking or oscillation movements meaning that the vibration on the device moves to a peak height of movement and eventually at some point [not necessarily the end point of movement] to the original position, Aoyanagi's discloses a first display mode image display without vibration, without counter-displacement values such as those vibrations detected smaller than the video signal paragraph [0017], and a second display mode image display enabling the counter-displacement of the image when a vibration is detected paragraph [0008], at the end of the oscillation or vibration back to the device's original position this transitions the image display device from the send display mode of vibration correction to the first display mode of normal operation since there are no more vibrations detected at this time*).

Aoyanagi does not disclose wherein the predetermined level is static nor that the predetermined level is defined prior to a vibration being detected.

It would have been obvious to one skilled in the art at the time of the invention to enable Aoyanagi's vibration system with a static predetermined level programmed prior to vibration detection allowing the system to be made cheaper and simpler lowering processing needs without the need of an additional sensor with a varying instantaneous level as disclosed by Aoyanagi (*paragraph [0017]*).

Regarding **claim 11**, Aoyanagi discloses an information providing apparatus, wherein: said mobile object is a vehicle (*paragraph [0001] reference vehicle*), and said image display means is configured so as to present image display of a road map image having a current position of said vehicle and an image expressing a travel route superposed therein, as said information (*paragraph [0002] reference navigation image*).

Regarding **claim 15**, Aoyanagi discloses an information providing apparatus, wherein: said mobile object is a vehicle (*paragraph [0001] reference vehicle*), and said image display means is configured so as to present image display of a road map image having a current position of said vehicle and an image expressing a travel route superposed therein, as said information (*paragraph [0002] reference navigation image*).

4. **Claims 2-4, 8-10, and 12-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Aoyanagi** as applied to claim 1 above, in view of **Chene et al.** (EP Patent Application 1207072), herein after referred to as Chene.

Regarding **claims 2, 8, and 12**, Aoyanagi discloses an information providing apparatus, wherein said operation control means takes part in a control of negating vibrations of a display screen on which said information is presented on the image display in said image display means, when the detection output signal is received from said vibration detecting means over the predetermined duration (*paragraphs [0005] and [0008] refer to rejection of claims 1 and 6*).

Aoyanagi does not specifically disclose to increase luminance over the predetermined duration.

Chene does disclose increasing luminance to further facilitate viewing of a display for a driver in a vibration environment (*abstract and paragraph [0009]*).

It would have been obvious to one skilled in the art at the time of the invention to combine Aoyanagi's device with Chene increasing luminance over the period to further facilitate viewing of a display for a driver in a vibration environment as disclosed by Chene (*abstract*).

Regarding **claims 3, 9, and 13**, Aoyanagi discloses an information providing apparatus, wherein said operation control means takes part in a control of negating vibrations of a display screen on which said information is presented on the image display in said image display means, when the detection output signal is received from said vibration detecting means sustains over the predetermined duration (*paragraphs [0005] and [0008] refer to rejection of claims 1 and 6*).

Aoyanagi does not specifically disclose to enlarging images corresponded to mark information and character information contained in said information over the predetermined duration of vibration.

Chene does disclose enlarging images corresponded to mark information and character information contained in said information to further facilitate viewing of a display for a driver in a vibration environment (*abstract and paragraph [00010]*).

It would have been obvious to one skilled in the art at the time of the invention to combine Aoyanagi's device with Chene enlarging images over the predetermined period to further facilitate viewing of a display for a driver in a vibration environment as disclosed by Chene (*abstract*).

Regarding **claims 4, 10, and 14**, Aoyanagi discloses an information providing apparatus, wherein said operation control means takes part in a control of negating vibrations of a display screen on which said information is presented on the image display in said image display means, when the detection output signal is received from said vibration detecting means sustains over the predetermined duration (*paragraphs [0005] and [0008] refer to rejection of claims 1 and 6*).

Aoyanagi does not specifically disclose to increasing difference in contrast between an image of high importance and an image of low importance contained in said information over the predetermined duration of vibration.

Chene does disclose increasing difference in contrast between an image of high importance and an image of low importance contained in said information

to further facilitate viewing of a display for a driver in a vibration environment (*abstract reference contrast may be adjusted to provide maximum readability which is a difference in contrast between that of what needs to be read high importance over that which either cannot be read or does not need to be read low importance*).

It would have been obvious to one skilled in the art at the time of the invention to combine Aoyanagi's device with Chene increasing difference in contrast between an image of high importance and an image of low importance to further facilitate viewing of a display for a driver in a vibration environment as disclosed by Chene (*abstract*)

enlarging images over the period since this would indicate a prolonged exposure of vibration to the device and further means to increase the view ability of the screen would be warranted.

Response to Arguments

5. Applicant's arguments filed 6/29/2011 have been considered. Applicant's arguments relating towards the finality of the previous office action is moot in view of RCE filed 10/17/2011. Further applicant's arguments relating towards the static "reference" predetermined level is not persuasive. Aoyanagi discloses the ability to have a reference level calculated by a predetermined formula. The predetermined formula varies the level dependent upon the vehicles acceleration subtracting this value from the reference level so vibrations not smaller than the

vehicles acceleration are detected or applied in the system of vibration compensation.

Aoyanagi discloses the ability of a predetermined level since Aoyanagi discloses the ability to detect the vehicles lateral motion (a level known before detection) via a predetermined formula. The office action takes the stance that a known method such as a reference level may replace a predetermined formula simplifying the system calculations needed to create a varying reference level as disclosed in the invention. The obvious statement is a substitution means by a known method and is upheld. This action is **non-final** in view of the RCE filed.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER E. LEIBY whose telephone number is (571)270-3142. The examiner can normally be reached on 9 - 5 Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Eisen can be reached on 571-272-7687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CHRISTOPHER E LEIBY/
Examiner, Art Unit 2629

October 20th, 2011